

Amendments to the Claims:

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-61 (Previously Cancelled)

62. (Currently Amended) A photoluminescent device comprising:

- a) an excitation source; and
- b) at least a first layer of photoluminescent phosphor particles adapted to be stimulated by said excitation source and which are selected from the group consisting of $Y_2O_3:Eu$, $(Y, Gd)BO_3:Eu$, $Zn_2SiO_4:Mn$, barium aluminate and doped barium magnesium aluminate, wherein said phosphor particles have a weight average particle size of from about 0.1 μm to about 10 μm , a substantially spherical morphology and wherein at least about 80 weight percent of said particles are not larger than two times said average particle size.

63. (Original) A photoluminescent device as recited in Claim 62, wherein said phosphor particles have an average size of from about 0.3 μm to about 5 μm .

64. (Original) A photoluminescent device as recited in Claim 62, wherein said excitation source comprises a gas and wherein said gas comprises xenon.

65. (Original) A photoluminescent device as recited in Claim 62, wherein said excitation source comprises a gas and wherein said gas comprises mercury.

66. (Original) A photoluminescent device as recited in Claim 62, wherein said particles comprise $Y_2O_3:Eu$.

67. (Original) A photoluminescent device as recited in Claim 62, wherein said particles comprise $(Y,Gd)BO_3:Eu$.

68. (Original) A photoluminescent device as recited in Claim 62, wherein said particles comprise $Zn_2SiO_4:Mn$.

69. (Currently Amended) A photoluminescent device as recited in Claim 62, wherein said particles comprise ~~$BaMgAl_{10}O_{17}:Eu$~~ barium magnesium aluminate doped with Eu.

70. (Currently Amended) A photoluminescent device as recited in Claim 62, wherein said particles comprise ~~BaAl₂O₃~~ barium aluminate.

71. (Currently Amended) A photoluminescent device as recited in Claim 62, wherein said particles comprise ~~BaMgAl₁₂O₁₉:Mn~~ barium magnesium aluminate doped with Mn.

72. (Original) A photoluminescent device as recited in Claim 62, wherein said layer is a substantially uniform layer of photoluminescent phosphor particles, said layer having an average thickness of not greater than about three times said average particle size.

73. (Original) A photoluminescent device as recited in Claim 62, wherein said device is a plasma display panel.

74. (Original) A photoluminescent device as recited in Claim 62, wherein said device is a fluorescent lamp.

75. (Original) A photoluminescent device as recited in Claim 62, wherein said device is an LCD backlight.

76. (Currently Amended) A plasma display panel, comprising:

- a) a rear panel comprising a plurality of row electrodes;
- b) a front panel comprising a plurality of column electrodes, wherein said row electrodes and said column electrodes are in perpendicular relation to form a plurality of addressable x-y coordinates;
- c) a photoluminescent phosphor powder dispersed on a substrate disposed between said electrodes, wherein said phosphor powder comprises particles having a host material selected from the group consisting of oxides, silicates, aluminates and borates, and having a substantially spherical morphology, a weight average particle size of not greater than about 5 μm and a particle size distribution wherein at least about 80 weight percent of said particles are not larger than two times said average particle size.

77. (Cancelled herein).

78. (Original) A plasma display panel as recited in Claim 76, wherein said average particle size is from about 0.3 μm to about 5 μm .

79. (Original) A plasma display panel as recited in Claim 76, wherein said particles have a particle size distribution wherein at least about 90 weight percent of said particles are not larger than about two times said weight average particle size.

80. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor particles comprise crystallites having an average crystallite size of at least about 25 nanometers.

81. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder is dispersed in a substantially uniform layer having an average thickness of not greater than about three times said average particle size.

82. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises ~~BaMgAl₁₀O₁₇:Eu~~ barium magnesium aluminate doped with Eu.

83. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises ~~BaMgAl₁₀O₁₇~~ barium magnesium aluminate and from about 8 to about 12 atomic percent Eu and wherein said ~~excitation-source-plasma display panel~~ comprises xenon gas as an excitation source.

84. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises ~~BaAl₁₀O₁₇:Mn~~ barium aluminate doped with Mn.

85. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises ~~BaAl₁₀O₁₇~~ barium aluminate and from about 8 to about 12 atomic percent Mn and wherein said ~~excitation-source-plasma display panel~~ comprises xenon gas as an excitation source.

86. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises Zn₂SiO₄:Mn.

87. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises Zn₂SiO₄ and from about 0.05 to about 2 atomic percent Mn and wherein said ~~excitation-source-plasma display panel~~ comprises xenon gas as an excitation source.

88. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises Y₂O₃:Eu.

89. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises Y_2O_3 and from about 4 to about 6 atomic percent Eu and wherein said ~~excitation source~~ plasma display panel comprises xenon gas as an excitation source.

90. (Original) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises $(Y,Gd)BO_3:Eu$.

91. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises $(Y,Gd)BO_3$ and from about 14 to about 20 atomic percent Eu and wherein said ~~excitation source~~ plasma display panel comprises xenon gas as an excitation source.

92. (Currently Amended) A plasma display panel as recited in Claim 76, wherein said phosphor powder comprises:

a) first phosphor particles of ~~$BaMgAl_{10}O_{17}:Eu$~~ barium magnesium aluminate doped with Eu;

b) second phosphor particles selected from the group consisting of $Zn_2SiO_4:Mn$, ~~$BaAl_{10}O_{17}:Mn$~~ barium aluminate doped with Mn and mixtures thereof; and

c) third phosphor particles selected from the group consisting of $Y_2O_3:Eu$, $(Y,Gd)BO_3:Eu$ and mixtures thereof.

Claims 93-205 (Previously Cancelled)